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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,623	10/14/2003	Julian B. Melendrez	ZIGP102US	2622
24041	7590	06/19/2007		
SIMPSON & SIMPSON, PLLC			EXAMINER	
5555 MAIN STREET			MCMAHON, MARGUERITE J	
WILLIAMSVILLE, NY 14221-5406				
			ART UNIT	PAPER NUMBER
			3747	
			MAIL DATE	DELIVERY MODE
			06/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/605,623

Applicant(s)

MELENDREZ, JULIAN B.

Examiner

Marguerite J. McMahon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melendrez (5,271,369) in view of Ettehadieh (5,063,368). Melendrez shows everything except utilizing a ferrous metal plate(s) disposed on an upper side of the magnet(s), wherein the magnet(s) and the metal plate(s) are of approximate size and shape such that substantial registration exists between the upper surface of the magnet and a planar surface of the metal plate. Ettehadieh teaches that it is old in the art to provide a ferrous metal plate 216 (see Figures 6 and 8, and column 1, lines 27-32, which cites the use in Figure 6 of a steel plate and column 2, lines 16-44, which describes the second embodiment shown in Figure 8) on the top surface of a pair of magnets 14.

It would have been obvious to one of ordinary skill in the art to modify Melendrez by providing a ferrous metal plate on the top surface of the magnet(s), in order to focus the direction of the magnetic field toward the fuel line and away from the engine, thus improving the efficiency of the magnets in magnetizing the fuel. In addition, it would have been obvious to provide a second metal plate to cover the top of the second

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magnet assembly. According to MPEP 2144.04 VI (B), it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. It would have been obvious to one of ordinary skill at the time the invention was made to provide a second metal plate, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

With respect to claim 17, it would have been prima facie obvious to substitute the north pole for the south pole as the pole adjacent the fuel line, since they are art recognized alternatives known for the same purpose, as evidenced by the various claims in the instant application citing the use of the south pole located adjacent the fuel line.

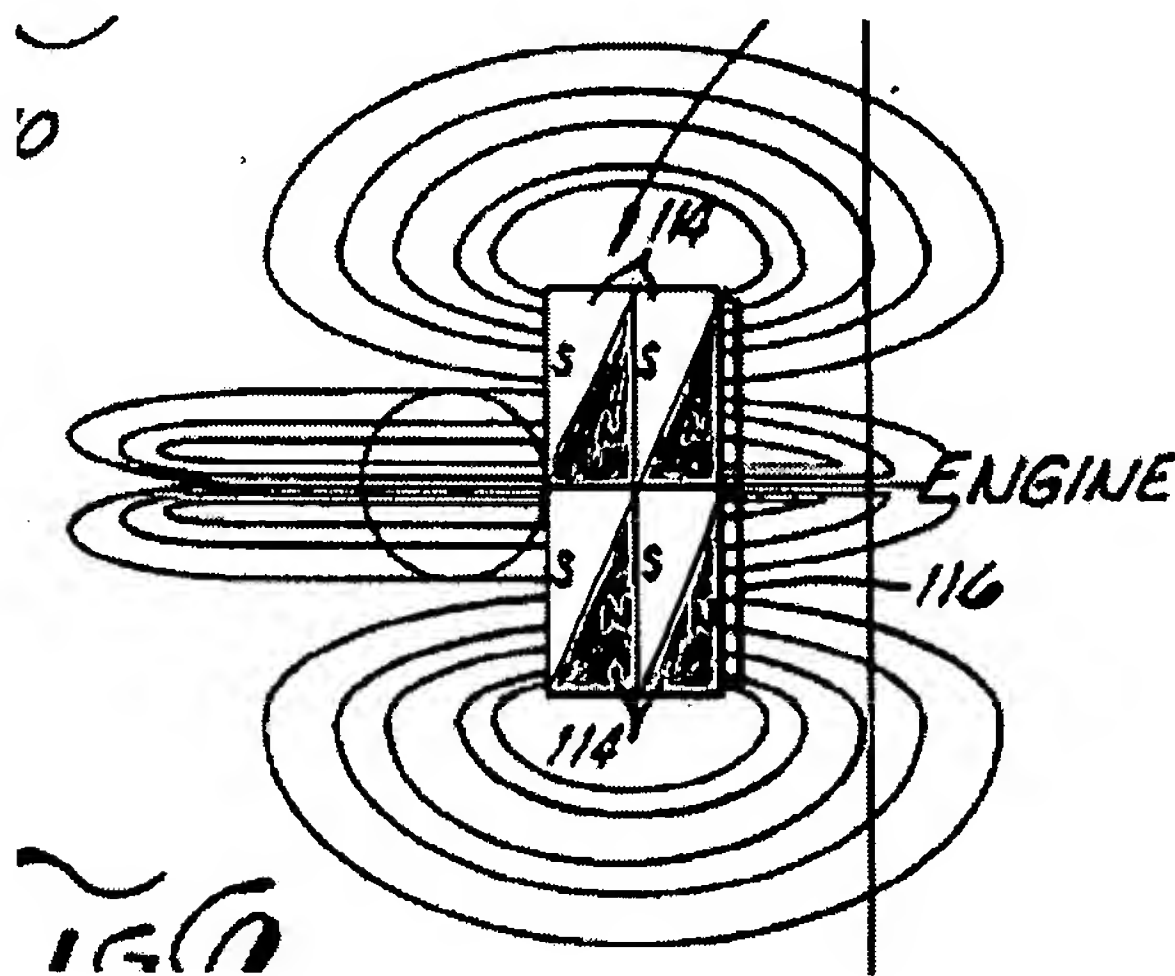
Response to Arguments

Applicant's arguments filed 4/16/07 have been fully considered but they are not persuasive.

Applicant has attacked the viability of the Ettehadieh reference by claiming that the magnets are configured such that like polarities are in direct contact with each other. This argument is based on an assumption that the divisions between the poles is parallel to the long sides of the magnets, as shown in the Figure drawn by Applicant in the Appendix to the Remarks/Arguments. If this assumption were correct, Ettehadieh would have problems, as suggested by Applicant. However, this assumption is not supported by any solid evidence in the Ettehadieh reference. The manner in which the poles are shown in the Figures of the Ettehadieh reference and particularly the manner

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in which the flux lines of force are drawn in the Ettehadieh reference suggests that a different assumption is more likely to be true, as shown below:



The Figure (Figure 6 of Ettehadieh) shows the poles such that the north poles are shaded (by the examiner to indicate the examiner's assumption about polarity division) and the south poles are left white. This kind of division between the poles can be assumed by the manner in which the poles are referenced and is consistent with the lines of flux shown emanating from the magnets, and allows the magnets to function without the problems obtained when assuming that the poles are divided by lines parallel to the long side of the magnets (i.e. vertical, in the case of Figure 6), as Applicant has. Since Ettehadieh is silent as to exactly the manner in which the poles are delineated, it makes sense to the examiner to make the assumption which would allow the device of Ettehadieh to be operable, rather than to assume that Ettehadieh would configure the polarity of the magnets, such that the device would be inoperable.

Applicant further argues that Ettehadieh is non-analogous, because, based upon his assumption, which the examiner considers to be erroneous, that the magnets of

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Ettehadieh would repulse each other. Applicant asserts that the actual magnetic flux lines that would result from the configuration he assumes to be shown in Figure 6-8 of Ettehadieh would be entirely different than that shown in those figures since the repulsion of like poles would not allow the configuration depicted in the figures. Based on these assumptions, Applicant argues that there is no motivation to combine the references and no reasonable expectation of success because the flux lines of Ettehadieh would be completely different from those produced by Melendrez. The examiner finds this unconvincing because, as explained above, if one assumes that the divisions between the poles are as shown above, then Ettehadieh will produce flux lines as shown in the figures of Ettehadieh, and this configuration allows the magnets to function in a manner similar to the magnets shown in the Melendrez reference.

Applicant further argues that the Examiner has provided no rational basis for combining Ettehadieh with Melendrez because, based upon his (erroneous) assumption, Ettehadieh teaches a completely different arrangement of magnets which would produce a completely different set of magnetic flux lines. Again, this is unconvincing because it is based upon an erroneous assumption, as explained above.

Applicant further argues that the examiner has relied upon impermissible hindsight reconstruction. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made,

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and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion


THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marguerite J. McMahon whose telephone number is 571-272-4848. The examiner can normally be reached on Monday-Wednesday and Friday, 10am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Cronin can be reached on 571-272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Marguerite McMahon
Primary Examiner
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